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Abstract

A method for performing operations and for improving production in a well includes the steps of: providing radio identification devices at known locations in the well, and providing a reader device configured to read the identification devices, and to control the operations responsive to signals from the identification devices. The method also includes the steps of providing a process tool, and transporting the process tool and the reader device through the well. The reader device is programmed to control the process tool upon reception of a response signal from a selected identification device. The method can be used to perform perforating processes, packer setting processes, bridge plug setting processes, logging processes, inspection processes, chemical treating processes, and cleaning processes. the method can be performed dynamically by controlling the tool as it moves through the well, or statically by stopping the tool at a particular location within the well. A system for performing the method includes the identification devices, the reader device, the process tool, and a computer or controller. In addition the identification devices can be placed in casing collars of the well and can be configured as passive devices or as active devices.

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